IN THE CLAIMS:

Please amend the claims as indicated below:
Please cancel claim 18, without prejudice.

1. (Currently Amended) A semiconductor device comprising:

at least two magnetic layers; and

a spacer layer formed between the magnetic layers, the spacer layer being configured to provide ferromagnetic exchange coupling between the layers, the magnetic layers experiencing anti-ferromagnetic dipole coupling, such that a net coupling of the magnetic layers is anti-ferromagnetic in a zero applied magnetic field, wherein the spacer layer comprises a weak ferromagnet.

2. (Original) The device of claim 1, comprising magnetic random access memory (MRAM).

3. (Original) The device of claim 1, wherein the net coupling of the magnetic layers comprises a sum of the exchange coupling and the dipole coupling.

4. (Original) The device of claim 1, wherein each of the magnetic layers has a same thickness.

5. (Original) The device of claim 1, wherein a difference in a thickness of each of the magnetic layers relative to one another is less than or equal to about ten percent.

6. (Original) The device of claim 1, wherein the magnetic layers are elliptical.

7. (Original) The device of claim 1, wherein the magnetic layers are circular.

8. (Original) The device of claim 1, wherein each of the magnetic layers has a same intrinsic anisotropy.

9. (Original) The device of claim 1, wherein one or more of the magnetic layers comprises an element selected from the group consisting of nickel, cobalt, iron, manganese and combinations comprising at least one of the foregoing elements.

10. (Original) The device of claim 1, wherein one or more of the magnetic layers comprise $Ni_{80}Fe_{20}$.

11. (Original) The device of claim 1, wherein the spacer layer comprises a transition metal.

12. (Original) The device of claim 11, wherein the transition metal is selected from the group consisting of chromium, copper, ruthenium, rhodium, palladium, rhenium, osmium, iridium, platinum and combinations comprising at least one of the foregoing transition metals.

13. (Original) The device of claim 1, wherein the spacer layer comprises an incomplete layer.

14. (Original) The device of claim 1, wherein the spacer layer comprises pinholes.

15. (Original) The device of claim 1, wherein the spacer layer comprises an insulator.

16. (Original) The device of claim 1, wherein the spacer layer comprises aluminum oxide.

17. (Original) The device of claim 1, wherein the spacer layer is non-magnetic.

18. (Cancelled)

19. (Original) The device of claim 18, wherein the weak ferromagnet comprises magnesium, iron, cobalt, nickel and combinations comprising at least one of the foregoing elements.

20. (Original) The device of claim 1, wherein the spacer layer has a thickness of from about one nanometer to about 1.6 nanometers.

21. (Original) The device of claim 1, wherein the spacer layer has a thickness of from about two nanometers to about 2.8 nanometers.

22. (Currently Amended) A method for coupling magnetic layers in a semiconductor device comprising at least two magnetic layers and a spacer layer therebetween, the method comprising the step of providing ferromagnetic exchange coupling of the magnetic layers, the magnetic layers experiencing anti-ferromagnetic dipole coupling, such that a net coupling of the magnetic layers is anti-ferromagnetic in a zero applied magnetic field, wherein the spacer layer comprises a weak ferromagnet.

23. (Original) The method of claim 22, wherein the spacer layer comprises a transition metal.

24. (Original) The method of claim 23, wherein the transition metal is selected from the group consisting of chromium, copper, ruthenium, rhodium, palladium, rhenium, osmium, iridium, platinum and combinations comprising at least one of the foregoing transition metals.

25. (Original) The method of claim 22, further comprising the step of varying a thickness of the spacer layer to attain ferromagnetic exchange coupling of the magnetic layers.